Available online at www.sciencedirect.com
ScienceDirect
Journal of Electrocardiology 39 (2006) 443–445
JOURNAL OF Electrocardiology
www.elsevier.com/locate/jelectrocard

Author Index: Volume 39, 2006

Abboud, S., 82
Adgey, A.A.J., 271
Aizawa, Y., 63, 219, 331
Akhtar, M., 336
Aksoy, Y., 194, 211
Akturk, E., 211
Albano, A., 162
Anh, D., 343
Antoine-Jonville, S., 31
Apiyasawat, S., 380
Apperson-Hansen, C., 315
Arakawa, K., 183
Aras, D., 409
Arenare, B., 259
Arheden, H., 67
Ariyarajah, V., 177, 380
Arya, A., 150, 404
Atar, S., 298

Bacharova, L., 430
Balabanski, T.L., 369
Banning, A.P., 22
Barbagelata, N.A., 298
Barutcu, I., 211
Batdorf, B.H., 266
Batdorf, N.J., 259
Battaloglu, B., 194
Beca, S., 199
Bell, S.J., 136
Benezet-Peñaranda, J., 419
Biber, B., 169
Birkbeck, J.P., 225
Birnbaum, Y., 73, 298
Blomström-Lundqvist, C., 48
Bogun, F., 343
Brenes, J.C., 377
Brockmeier, K., 188, 425
Brunken, R., 315
Burri, H., 253, 310

Calabrò, M.P., 38, 42
Carerj, S., 38
Carlsson, M.B., 67
Castellanos, A., 377
Catanzaro, J.N., 342
Çehreli, S., 211
Celenk, M.K., 409
Celik, T., 301
Chantad, D., 7
Chen, C., 206
Chernyak, Y.B., 315
Chevalier, P., 310
Childers, R., 426
Chinushi, M., 63, 219, 331
Chirinos-Medina, J.A., 377
Colak, C., 194
Coleman, M.E., 3, 346, 355
Criley, J.M., 113, 180

de Bisschop, C., 31
Dehghani, M.R., 150, 404
del Carpio, F., 377
Denjean, A., 31
Deveci, B., 409
Douglas, P.K., 259
Douglas, R.A., 93
Drew, B.J., 305
Dweck, M.R., 324

Eisenstein, E.L., 241
Elkayam, U., 309
Emmel, M., 188
Engblom, H., 67
Erdil, N., 194
Ericson, M., 48
Eskola, M.J., 368
Evans, R.T., 259

Fayn, J., 310
Fazelifar, A.F., 404
Feiveson, A.H., 259, 266
Feldman, C.L., 13
Feng, Y., 206
Fields, M., 389
Filho, M.M., 93
Flapan, A.D., 324
Forlini, M.-C., 310
Furushima, H., 63, 219

Gedevanishvili, A., 73
Geller, L., 369
Gentry, M., 136
Goldschlager, N.F., 336
Gomis, P., 282
Gorenek, B., 412
Grant, T., 199
Greenfield, J.C., Jr., 162

Haaverstad, R., 103
Häggmark, S., 169
Haghjoo, M., 150, 404
Hall, M.A., 225
Haney, M.F., 169
Hao, K., 206
Harju, J.A., 368
Harris, I.S., 305
Hartman, G., 282
Hedström, E., 67
Heidary, S., 309
Hemminger, E.J., 180
Hescheler, J., 425
Hines, M., 421
Hoekema, R., 290
Hong, X., 206
Horáček, B.M., 162
Hörnsten, R., 57
Hosaka, Y., 63
Hsu, V.M., 385
Huang, A., 206
Huhtala, H., 368
Hurst, J.W., 112
Hwang, C., 400

Ihara, Z., 290
Ishihara, M., 183
Isik, E., 301
Isseroff, H., 389
Iyisoy, A., 301
Izumi, D., 63

Jacubowitz, S., 136
Jensen, S.M., 57
Jidéus, L., 48

0022-0736/$ – see front matter
doi:10.1016/S0022-0736(06)00287-1

Joachimsson, P.-O., 48
Johansson, G., 169

Kahn, D.Y., 275
Karhunen, P.J., 368
Karvounis, H.I., 103
Kashimura, J., 45
Kato, R., 183
Katoh, T., 45
Kenny, A., 103
Kern, L., 232
Kesek, M., 48
Khalifé, K., 22
Kharin, S.N., 88
Kim, Y.-H., 400
Kinoshita, S., 45
Kiyota, N., 45
Kohli, A., 199
Komoltri, C., 7
Komura, S., 63, 219
Kornyei, L., 369
Kosar, F., 194
Kose, S., 301
Krandycheva, V.V., 88
Krishnan, S., 343
Krittayaphong, R., 7
Kuehlkamp, V., 22
Kulecz, W.B., 73
Kursaklioglu, H., 301

Lander, P., 282
Lang, C.C., 324
Lauer, M.S., 315
Lazzara, R., 282
Lee, E., 305
Leibrandt, P.N., 136
Leider, J., 199
Li, D., 206
Li, J., 206
Lieber, M., 315
Louridas, G.E., 103
Lovallo, W., 421
Luzza, F., 38

Maden, O., 409
Madias, J.E., 110, 142, 156, 340, 413, 415, 434
Marantz, P., 199
Marcus, F.I., 55
Mauric, A.T., 42
Maynard, C., 13, 136
McAtee, P., 232
Meij, S.H., 29
Meyers, D.G., 225
Michaels, A.D., 305
Moreira, L.F., 93
Moreyra, A.E., 385
Munsey, D., 136

Nakamura, Y., 331
Naschitz, J., 389
Näslund, U., 169
Neilson, J.M., 324
Nelson, W.P., 113
Nelwan, S.P., 29
Nett, M.P., 342
Niemelä, K.O., 368
Nikoo, M.H., 404
Nikus, K.C., 368
Nilsson, L., 48
Nisanoglu, V., 194
Nishi, S.P., 298
Nishioka, S., 93
Nordin, C., 199

Ohsuzu, F., 183
Okamura, K., 63
Oreto, G., 38, 42
Ortega-Carnicer, J., 419
Osaki, A., 63
Ott, P., 55
Owens, C.G., 271
Ozdemir, R., 211
Ozeke, O., 409

Pahlm, O., 13, 67
Pak, H.-N., 400
Palmeri, M.A., 162
Papadopoulos, C.E., 103
Paprika, D., 369
Parharidis, G.E., 103
Parsaie, M., 150
Pastore, C.A., 93
Pedrosa, A., 93
Peng, S., 206
Peters, R.J., 22
Pettersson, J., 13
Pichon, A., 31
Pillekamp, F., 425
Pothier, C.E., 315
Préda, I., 135
Puri, P., 380

Rahman, M.A., 73
Ramires, J.F., 93
Rashid, A., 421
Rautaharju, P.M., 160, 235
Rembert, J.C., 162
Reppel, M., 425
Rickards, A.F., 22
Ristow, B., 230
Rosner, I., 389
Rota, M., 342
Roulaud, M., 31
Rubel, P., 310

Sabo, E., 389
Sadr-Ameli, M.A., 150, 404
Sakurai, M., 395
Samesima, N., 93
Sarma, R., 309
Sarmiento, L., 73
Sasaki, K., 395
Sattam, W., 73
Savona, M.R., 136
Scherlag, B.J., 421
Schickendantz, S., 188
Schiller, N.B., 230
Schlegel, T.T., 73, 259, 266, 358
Sechtem, U., 22
Sejersten, M., 13
Selcuk, M.T., 409
Selvester, R.H., 238
Shah, D., 253
Shalganov, T.N., 369
Shandling, A.H., 232
Sharif, D., 389
Shimokawa, J., 395
Shindler, D., 385
Shmakov, D.N., 88
Shuping, K., 282
Sincer, I., 211
Spodick, D.H., 177, 348, 380
Sreeram, N., 188
Starc, V., 358
Starobin, J.M., 315
Sugiura, H., 219
Suhr, O.B., 57
Sunthorn, H., 253
Switzenberg, S., 232
Szilagyi, S., 369
Szili-Torok, T., 369

Tagawa, M., 331
Takase, B., 183
Tanabe, Y., 63, 219
Tobias, N., 93
Topal, E., 211
Topaloglu, S., 409
Touboul, P., 310
Trägårdh, E., 67, 87
Traykov, V.B., 369
Tsai, F.S., 309
Tsutsui, H., 395
Tuero, E., 298

Ulupinar, H., 409

van Oosterom, A., 290
Vanyi, J., 369
Vassalle, M., 342
Vatasescu, R., 369
Vaught, C., 136

Wagner, G., 67, 282
Wagner, G.S., 1, 13, 133, 136, 162, 238
Wall, T.C., 136

Wang, B., 206
Wang, X., 206
Warren, J.W., 162
Warren, S., 282
Washizuka, T., 63, 219
Watanabe, H., 63, 219
Wehr, G., 22
Wiklund, U., 57
Wilson, A., 385
Wilson, D.B., 225
Wokhlu, N., 385
Wu, D., 206
Wung, S.-F., 275

Xing, H., 206
Xu, X., 206

Yamanashi, W.S., 421
Yeghiazarians, Y., 305
Yildiz, A., 409
Yokoshiki, H., 395
Young, D.R., 136
Yu, Y., 206
Yuksel, U.C., 301

Zaglavara, T., 103
Zaharia, V., 199
Zhang, Y., 206
Zhou, S., 13
Zlochiver, S., 82

Available online at www.sciencedirect.com
ScienceDirect
Journal of Electrocardiology 39 (2006) 446–453
JOURNAL OF Electrocardiology
www.elsevier.com/locate/jelectrocard

Subject Index: Volume 39, 2006

Ablation
with class III antiarrhythmic agents, for VT after congenital heart disease repair, long-term outcomes of, 219
at coronary ostium, to induce nonreentrant atrioventricular nodal tachycardia due to triple nodal pathways, 395
of twin atrioventricular node with interruption of the IVC and atrial nodal reentrant tachycardia, 400
Accessory pathways
bradycardia-dependent block of, in a patient with alternans Wolff-Parkinson-White syndrome, 419
Acute coronary syndromes (ACS). *See* **Coronary artery disease**
Acute myocardial infarction (AMI). *See* **Myocardial infarction (MI), acute**
Adenosine tetrofosmin
MPI, high-frequency QRS ECG in predicting perfusion defects during, 73, 87
AF. *See* **Atrial fibrillation**
Algorithms
for diagnosis of the mechanism and chamber of origin in atrial tachycardias, 369
Ambulatory electrocardiography
12-lead Holter recording system, in evaluation of pediatric arrhythmia, 188
variant angina with vagal nerve–mediated coronary vasospasm causing lethal VF, 183
Aneurysm
ventricular, ST-segment counterpoise in discordant ECG diagnosis of, 340
Aneurysmectomy
concomitant with CABG, effects on QT interval duration and dispersion, 194
Animal models
assessment of P-wave morphology changes by mapping in, 1
effect of caffeine on AF inducibility, 421
experimental pig model, relation of vectorcardiographic ST deviations to increased HR without myocardial ischemia, 169
impulse propagation in late-stage embryonic and neonatal murine ventricular slices, 425
Antiarrhythmic agents
class III, with ablation, for VT after congenital heart disease repair, long-term outcomes of, 219
Antidepressants, tricyclic
Brugada ECG pattern due to overdose of, 336
Arousal
noxious, effects on ventricular repolarization, QT interval and T wave morphology in healthy subjects, 324
Arrhythmias
evaluation with ambulatory 12-lead Holter recording system in children, 188
Atrial fibrillation (AF)
inducibility of, effect of caffeine on animal models, 421
postoperative, role of premature atrial contractions as main triggers of, 1, 48, 55
Atrial flutter
with 2:1 atrioventricular conduction ratio, LBBB in alternate beats during, 38
unusual atrioventricular conduction abnormality, 1
Atrial premature contractions
potential triggers of atrial fibrillation, 1
Atrial tachycardia
mechanism and chamber of origin, algorithm for diagnosis of, 369
sustained, therapeutic safety of ECG, 1
Atrial volume
left, relation to P-wave morphology, assessed by 2-dimensional echocardiography *vs.* 12-lead ECG, 225, 230
Atrioventricular block
2-level, and concealed electrotonic conduction, association with Wenckebach periodicity, 45
Atrioventricular conduction
2:1 ratio, LBBB in alternate beats during atrial flutter with, 38
unusual abnormalities, 1
Atrioventricular nodal tachycardia
nonreentrant, due to triple nodal pathways, induction by ablation at coronary sinus ostium, 395
reentrant, and IVC interruption, ablation of twin atrioventricular node with, 400

0022-0736/$ – see front matter
doi:10.1016/S0022-0736(06)00289-5

Atrioventricular node
twin, with IVC interruption and atrioventricular nodal reentrant tachycardia, ablation of, 400
Autonomic tone
and role of premature atrial contractions as main triggers of AF, 48

Bachmann's bundle
conduction pathways in progression of partial IAB to advanced IAB, 177
Bland & Altman
interchangeability between FFT and autoregressive spectral analysis of HRV, 31
Blood pressure
relation to QTc interval in Chinese hypertensives, 206
Body surface mapping
potential distribution of P wave in rats, 88
ventricular activation patterns in cardiac resynchronization of patients with LBBB and heart failure, 1, 93
Body surface mass
accuracy of ECG estimates, assessment with cardiac magnetic resonance imaging in healthy subjects, 1
Body surface potential mapping. *See* **Body surface mapping**
Bradycardia-dependent block
in accessory pathway in a patient with alternans Wolff-Parkinson-White syndrome, 419
Brugada syndrome
ECG pattern due to tricyclic antidepressant overdose, 336
elimination of late potentials by quinidine in a patient with, 63
variant, exercise-induced VT with J point ST-segment elevation in, 409
and vasospastic angina, shortening of VF interval after verapamil administration in a patient with, 331
Bundle branch block. *See also* **Left bundle branch block; Right bundle branch block**
body surface maps for understanding ventricular activation in, 1

CABG. *See* **Coronary artery bypass grafting**
CAD. *See* **Coronary artery disease**
Caffeine
effect on AF inducibility in animal models, 421
Cardiac resynchronization therapy
for LBBB and heart failure, body surface mapping of ventricular activation patterns, 93
Cardiac rhythm
and ST-segment deviation, assessment by EASI-derived *vs.* standard 12-lead ECG, 7, 29
Cardiologist
accuracy of ECG interpretation by, in the setting of incorrect computer analysis, 343, 348
Children
arrhythmia evaluation with 12-lead Holter recording system in, 188
Chronic fatigue syndrome
dysautonomia and shortened QTc interval in, 389
Clinical research
problem-based learning of skills in, 1, 120
Compensatory pause
postponed, interpolated premature ventricular contractions with, 377
Computer analysis
incorrect, accuracy of ECG interpretation by cardiologist in the setting of, 343, 348
Conduction system
concealed electrotonic, and 2-level atrioventricular block, association with Wenckebach periodicity, 45
in late-stage embryonic and neonatal murine ventricular slices, 425
Congenital heart disease
repair, long-term outcomes of radiofrequency catheter ablation with class III antiarrhythmic agents for, 219
Continuing medical education
problem-based learning of research skills, 1, 120
Coronary artery
slow flow, effects of trimetazidine on HRV in patients with, 211
Coronary artery bypass
AF after, role of premature atrial contractions as main triggers of, 48, 55
Coronary artery bypass grafting (CABG)
and concomitant aneurysmectomy, effects on QT interval duration and dispersion, 194
Coronary artery disease (CAD)
acute
current concepts for ECG diagnosis of
vector-based EASI lead system *vs.* conventional 12-lead ECG for diagnosis of, 22, 29
association between QT dispersion and myocardial viability after revascularization in patients with, 103
prognostic significance of signal-averaged ECG in patients with ICDs for, 150
significant, relation to prevalence of cardiac ectopy in elderly patients with echocardiographically normal hearts, 232
Coronary artery occlusions
acute, quantitative evaluation of ST-segment changes on 18-lead ECG during, 275
proximal right, precordial ST-segment elevation in, 301
Coronary sinus
ostium, nonreentrant atrioventricular nodal tachycardia due to triple nodal pathways induced by ablation at, 395

Coronary vasospasm
mediated by vagal nerve, causing lethal VF in a patient with variant angina, 183
Cost-benefit analysis
of ECG, 241

Diastole
mechanisms of voltage oscillations in sinoatrial node, 342
Dobutamine stress echocardiography
association between QT dispersion and myocardial viability after revascularization in patients with chronic ischemic cardiomyopathy, 1, 103
Dysautonomia
and shortened QTc interval, in chronic fatigue syndrome, 389

EASI lead system
vector-based, 1
vs. conventional 12-lead ECG, for diagnosis of ACS, 22, 29
vs. paramedic-acquired 12-lead ECGs using Mason-Likar limb lead configuration, in patients with chest pain, 13, 29
vs. standard 12-lead ECG, in assessment of ST-segment deviation and cardiac rhythm, 7, 29
ECG. *See* **Electrocardiography**
ECGViewer
virtual tool for teaching rhythm analysis, 113
Echocardiography
2-dimensional, *vs.* 12-lead ECG, in assessment of P-wave morphology correlation with left atrial volumes, 225, 230
relation of prevalence of cardiac ectopy in elderly patients with normal hearts to significant CAD, 232
Ectopy
prevalence in elderly patients with echocardiographically normal hearts, relation to significant CAD, 232
18-lead ECGs
quantitative evaluation of ST-segment changes during acute coronary occlusions, 275
Elderly
with echocardiographically normal hearts, relation of prevalence of cardiac ectopy to significant CAD, 232
Electrocardiography (ECG).
See also **High-frequency ECG; 12-lead ECGs; 18-lead ECGs; Low voltage electrocardiography; Signal-averaged ECG**
accuracy of interpretation by cardiologist in the setting of incorrect computer analysis, 343, 348
atrial repolarization during PQ interval, 290
beat-to-beat, in survivors of sudden death without structural heart disease, 310
Electrocardiography (ECG) (*continued*)
body surface mapping of ventricular activation patterns in cardiac resynchronization of patients with LBBB and heart failure, 93
Brugada pattern due to tricyclic antidepressant overdose, 336
conducting cost-benefit analysis of, 241
current concepts for diagnosis of non–ST-segment elevation ACS, 271
difficulties in evaluation and monitoring of AMI and acute ischemia, 156
effect of high-pass filters on ST segment and simulation of AMI, 253
estimates of body surface mass in healthy subjects, assessment of accuracy with cardiac magnetic resonance imaging, 1
lead placement pocket guides and Competency Assessment Guide for technologists, 3
methods for determining HRV at rest and during stress, 1
MI size estimation using automated Selvester Scoring System, 162
and phonocardiography, of third and fourth heart sounds during AMI, 305
P-wave morphologic markers in IAB, 380
RBBB mimicking left ventricular pacing, 180
reporting and overreading of, 346
standard *vs.* stress, effects of patient position, 142
ST-segment counterpoise in discordant diagnosis of ventricular aneurysm, 340
teachers and teaching of, 112
teaching interpretation of, 426
teaching others to read, 1, 110
therapeutic safety in sustained atrial and ventricular tachycardias, 1
tips and techniques on using disposable tab electrodes to prevent lead interchange, 355
transmission from paramedic to emergency department, failure to reduce delays in primary PCI for AMI, 136
virtual tools for teaching rhythm analysis, 1, 113
Electrodes
disposable tab, to prevent ECG lead interchange, tips and techniques on use of, 355
Electrotonic conduction
concealed, and 2-level atrioventricular block, association with Wenckebach periodicity, 45
Emergency department
to paramedic, failure of ECG transmission to reduce delays in primary PCI for AMI, 136
Exercise
QT/R-R hysteresis induced by, as predictor of myocardial ischemia, 315
VT induced by, and J point ST-segment elevation, in variant Brugada syndrome, 409
Exercise stress test
difficulties in evaluation and monitoring of AMI and acute ischemia, 156
vs. standard ECG, effects of patient position, 142

Exercise test
safety in variant angina with 31-mm ST elevation, 309

Familial amyloidotic polyneuropathy (FAP)
ventricular late potentials in, association with ventricular arrhythmia, 57
FAP. *See* **Familial amyloidotic polyneuropathy**
Fast Fourier transform (FFT)
interchangeability with autoregressive analysis in spectral analysis of HRV, 31
FFT. *See* **Fast Fourier transform**
Fibrinolytic therapy
enhanced use in AMI, association with recording lead V_4R, 368
Filters
high-pass electrocardiographic, effect on ST segment and simulation of AMI, 253
Focal atrial tachycardia
mechanism and chamber of origin, algorithm for diagnosis of, 369

Healthy subjects
accuracy of ECG estimates of body surface, assessment with cardiac magnetic resonance imaging in, 1
effects of noxious arousal on ventricular repolarization, QT interval and T wave morphology in, 324
left ventricular mass estimation by 12-lead ECG *vs.* cardiac magnetic resonance imaging in, 67
Heart disease
structural, beat-to-beat ECG in survivors of sudden death without, 310
Heart failure
and LBBB, body surface mapping of ventricular activation patterns in cardiac resynchronization of patients with, 93
Heart rate (HR)
increased, without ischemia, relation to vectorcardiographic ST deviations in an experimental pig model, 169
Heart rate variability (HRV)
in patients with slow coronary artery flow, effects of trimetazidine on, 211
at rest and during stress, method for determination of, 1
spectral analysis of, interchangeability between autoregressive analysis and FFT, 31
Heart sounds
third and fourth, during AMI, ECG and phonocardiography of, 305
Hepatitis C
coinfection, role in etiology of QTc prolongation in HIV disease, 199
Hibernating myocardium
after revascularization in patients with chronic ischemic cardiomyopathy, association with QT dispersion, 1, 103
High-frequency ECG
12-lead QRS, temporal and postural variation in asymptomatic individuals, 259
of QRS complex
for diagnosing and monitoring ischemic heart disease, 82
in predicting perfusion defects during MPI, 73, 87
signal-averaged, late potentials as triggers of ventricular arrhythmias, 1
HIV disease
role of hepatitis C coinfection in etiology of QTc prolongation in, 199
HR. *See* **Heart rate**
HRV. *See* **Heart rate variability**
Hypercalcemia
ST-segment elevation induced by, mimicking AMI, 298
Hypertension
relation of QTc interval to blood pressure in Chinese with, 206
Hysteresis
exercise-induced, of QT/R-R intervals, as predictor of myocardial ischemia, 315

IAB. *See* **Interatrial block**
ICDs. *See* **Implantable cardioverter defibrillators**
Implantable cardioverter defibrillators (ICDs)
effect of first VT cycle length on recurrence on ventricular arrhythmia in patients with, 404
prognostic significance of signal-averaged ECG in CAD patients with, 150
RBBB mimicking left ventricular pacing in ECG, 180
Impulse propagation
in late-stage embryonic and neonatal murine ventricular slices, 425
Inferior vena cava (IVC)
interruption of, and atrioventricular nodal reentrant tachycardia, ablation of twin atrioventricular node with, 400
Interatrial block (IAB)
conduction pathways in progression from partial to advanced, 177
electrocardiographic markers of P-wave morphology in, 380
Intravenous infusion
of fluids, causing reversible attenuation of voltage of QRS complexes and P waves and shortening of QRS duration and QTc, 415
Intraventricular conduction
nusual abnormalities, 1
Ischemia
acute, difficulties in ECG evaluation and monitoring of, 156, 160

Ischemia (*continued*)
detection during MPI, accuracy of high-frequency QRS ECG in, 1, 73, 87
diagnosis and monitoring with high-frequency QRS ECG, 82
vector-based EASI lead system *vs.* conventional 12-lead ECG for diagnosis of, 22, 29
Ischemic cardiomyopathy
chronic, association between QT dispersion and myocardial viability after revascularization in patients with, 1, 103
IVC. *See* **Inferior vena cava**

J waves
with ST-segment elevation, and exercise-induced VT, in variant Brugada syndrome, 409

Ladder diagram
virtual tool for teaching ECG rhythm analysis, 113
Late potentials
elimination by quinidine in a patient with Brugada syndrome, 63
on signal-averaged high-frequency ECG as triggers of ventricular arrhythmias, 1
ventricular, in FAP, association with ventricular arrhythmia, 57
LBBB. *See* **Left bundle branch block**
Leads
placement of, guide for ECG technologists/technicians, 3
tips and techniques on using disposable tab electrodes to prevent interchange of, 355
V_4R recording, association with enhanced use of fibrinolytic therapy in AMI, 368
Left bundle branch block (LBBB)
in alternate beats during atrial flutter with 2:1 atrioventricular conduction ratio, 38
and heart failure, body surface mapping of ventricular activation patterns in cardiac resynchronization of patients with, 93
Left ventricular dysfunction
impaired, association between QT dispersion and myocardial viability after revascularization in patients with, 103
Left ventricular hypertrophy
criteria, relation to left ventricular mass, estimation by 12-lead ECG *vs.* cardiac magnetic resonance imaging in healthy subjects, 67
Left ventricular mass
estimation by 12-lead ECG *vs.* cardiac magnetic resonance imaging in healthy subjects, 67
Letter to the Editor
association of Wenckebach periodicity with 2-level atrioventricular block and concealed electrotonic conduction, 45
PMI with RBBB, diagnostic significance of early QRS forces in V1-V2, 413

Low voltage electrocardiography
caused by large perioperative intravenous fluid infusions, reversible attenuation of, 415

Macroreentrant atrial tachycardia
mechanism and chamber of origin, algorithm for diagnosis of, 369
Magnetic resonance imaging
accuracy of ECG estimates of body surface mass in healthy subjects, 1
vs. 12-lead ECG, estimation of left ventricular mass in healthy subjects, 67
Mason-Likar limb lead configuration
in paramedic-acquired 12-lead ECGs, *vs.* EASI-derived 12-lead ECGs, in patients with chest pain, 13, 29
Medical education
teachers and teaching of ECG, 112
teaching ECG interpretation, 1, 110, 426
MI. *See* **Myocardial infarction**
Microelectrode arrays
impulse propagation in late-stage embryonic and neonatal murine ventricular slices, 425
MPI. *See* **Myocardial perfusion imaging**
Myocardial infarction (MI)
acute
association of recording lead V_4R to enhanced use of fibrinolytic therapy in, 368
difficulties in ECG evaluation and monitoring of, 156, 160
failure of ECG transmission from paramedic to emergency department in reducing delays in primary PCI for, 136
mimicked by hypercalcemia-induced ST-segment elevation, 298
phonocardiographic and ECG of third and fourth heart sounds during, 305
simulation by electrocardiographic high-pass filters, 253
posterior, with RBBB, diagnostic significance of early QRS forces in V1-V2 on, 413
size estimation using automated Selvester Scoring System, 162
Myocardial ischemia
in an experimental pig model, relation of vectorcardiographic ST deviations to increased HR without, 169
predicted by exercise-induced QT/RR hysteresis, 1315
transient, induced by PTCA, abnormal intra-QRS potentials in, 282
Myocardial perfusion imaging (MPI)
high-frequency QRS ECG in predicting perfusion defects during, 73, 87
value of high-frequency alterations in QRS complex for diagnosis of myocardial ischemia, 1

Myocardium
viability after revascularization in patients with chronic ischemic cardiomyopathy, association with QT dispersion, 1, 103

Orthostatic stress
interchangeability between FFT and autoregressive spectral analysis of HRV during, 31
Oscillatory potentials
diastolic, in sinoatrial node, mechanisms of, 342
Outcomes
long-term, radiofrequency catheter ablation with class III antiarrhythmic agents for VT after congenital heart disease repair, 219
Overdose
of tricyclic antidepressants, Brugada ECG pattern due to, 336

PCI. *See* **Percutaneous coronary intervention**
Percutaneous coronary intervention (PCI)
for AMI, failure of ECG transmission from paramedic to emergency department in reducing delays in, 136
tachyarrhythmias in, 412
Percutaneous transluminal coronary angiography (PTCA)
transient myocardial ischemia induced by, abnormal intra-QRS potentials in, 282
Peripheral edema
reversible attenuation of low voltage ECG and shortening of QRS duration and QTc interval due to, 415
Phonocardiography
and ECG, of third and fourth heart sounds during AMI, 305
Posterior myocardial infarction (PMI). *See* **Myocardial infarction (MI), posterior**
Posture
effect on 12-lead high-frequency QRS ECG signals in asymptomatic individuals, 259
effects on standard *vs.* stress ECG, 142
PQ interval
atrial repolarization during, 290
Premature atrial contractions
role as main triggers of postoperative AF, 48, 55
Premature ventricular contractions
interpolated, with postponed compensatory pauses, 377
Proximal right coronary artery occlusion
acute, precordial ST-segment elevation in, 301
PTCA. *See* **Percutaneous transluminal coronary angiography**
Pulmonary artery pressure
mean, and P-wave amplitude, in scleroderma, 385
P waves
amplitude, and mean pulmonary artery pressure, in scleroderma, 385

P waves (*continued*)
body surface potential distribution in rats, 1, 88
morphology
electrocardiographic markers in IAB, 380
relation to left atrial volumes, assessed by 2-dimensional echocardiography *vs.* 12-lead ECG, 225, 230
reversible attenuation of voltage of, after large perioperative intravenous fluid infusions, 415

QRS complexes
early in V1-V2, significance in diagnosis of PMI with RBBB, 413
high-frequency alterations in, for diagnosis of myocardial ischemia, 1
high-frequency ECG
for diagnosing and monitoring ischemic heart disease, 82
in predicting perfusion defects during MPI, 73, 87
reversible attenuation of voltage of, after large perioperative intravenous fluid infusions, 415
in an unusual RBBB, 42
QRS duration
relation to left ventricular mass, estimation by 12-lead ECG *vs.* cardiac magnetic resonance imaging in healthy subjects, 67
shortening of, after large perioperative intravenous fluid infusions, 415
QRS potentials
abnormal intra, in PTCA–induced transient myocardial ischemia, 282
QRS signals
in 12-lead high-frequency ECG, temporal and postural variation in asymptomatic individuals, 259
QTc interval
relation to blood pressure in Chinese hypertensives, 206
shortened
and dysautonomia, in chronic fatigue syndrome, 389
after large perioperative intravenous fluid infusions, 415
QTc prolongation
in HIV disease, role of hepatitis C coinfection in etiology of, 199
QT dispersion
association with myocardial viability in patients with chronic ischemic cardiomyopathy after revascularization, 1, 103
and duration, effects of CABG and concomitant aneurysmectomy on, 194
QT interval
beat-to-beat variability of, real-time multichannel system for, 358
duration and dispersion, effects of CABG and concomitant aneurysmectomy on, 194

QT interval (*continued*)
exercise-induced hysteresis as predictor of myocardial ischemia, 315
in healthy subjects, effects of noxious arousal on, 324
Quinidine
elimination of late potentials in a patient with Brugada syndrome, 63

Radiofrequency ablation. *See* **Ablation**
Rautaharju, Pentti
interview with, 238
RBBB. *See* **Right bundle branch block**
Reliability
of T-wave morphology measures, effect of signal averaging on, 266
Repolarization
atrial, during PQ interval, 290
ventricular, in healthy subjects, effects of noxious arousal on, 324
Reproducibility
of T-wave morphology measures, effect of signal averaging on, 266
Research education
problem-based learning of skills, 1, 120
Right bundle branch block (RBBB)
mimicking left ventricular pacing in ECG, 180
with PMI, diagnostic significance of early QRS forces in V1-V2, 413
unusual, 42
R-R interval
exercise-induced hysteresis as predictor of myocardial ischemia, 315

Schubert, Ernst
interview with, 430
Scleroderma
P-wave amplitude and mean pulmonary artery pressure in, 385
Selvester Scoring System
automated, for MI size estimation, 162
Signal-averaged ECG
abnormal intra-QRS potentials in PTCA–induced transient myocardial ischemia, 282
high-frequency, late potentials as triggers of ventricular arrhythmias, 1
late potentials in, elimination by quinidine in a patient with Brugada syndrome, 63
prognostic significance in CAD patients with ICDs, 150
Sinoatrial node
mechanisms of diastolic voltage oscillations in, 342
Spectral analysis
of HRV, interchangeability between autoregressive analysis and FFT, 31
ST segment
effect of high-pass electrocardiographic filters on, 253
ST-segment counterpoise
in acute ischemia and AMI, difficulties in ECG evaluation and monitoring of, 156, 160
in discordant ECG diagnosis of ventricular aneurysm, 340
ST-segment deviation
and cardiac rhythm, assessed by EASI-derived *vs.* standard 12-lead ECG, 7, 29
in diagnosis of ACS, vector-based EASI lead system *vs.* conventional 12-lead ECG, 22, 29
on 18-lead ECG during acute coronary occlusions, quantitative evaluation of, 275
vectorcardiographic, relation to increased HR without ischemia in an experimental pig model, 169
ST-segment elevation
hypercalcemia-induced, mimicking AMI, 298
and J point, with exercise-induced VT, in Brugada syndrome, 409
precordial, in acute occlusion of the proximal right coronary artery, 301
31-mm, in variant angina secondary to exercise testing, 309
Sudden cardiac death
due to VF, variant angina with vagal nerve–mediated coronary vasospasm resulting in, 183
without structural heart disease, beat-to-beat ECG in survivors of, 310
S waves
in an unusual RBBB, 42

Tachycardia
in PCI, 412
Trimetazidine
effects on HRV in patients with slow coronary artery flow, 211
T waves
morphology
effect of signal averaging on reproducibility and reliability of measures of, 266
in healthy subjects, effects of noxious arousal on, 324
12-lead ECGs
abnormal intra-QRS potentials in PTCA–induced transient myocardial ischemia, 282
EASI-derived
vs. paramedic-acquired using Mason-Likar limb lead configuration, in patients with chest pain, 13, 29
vs. standard, in assessment of ST-segment deviation and cardiac rhythm, 7, 29
high-frequency QRS, temporal and postural variation in asymptomatic individuals, 259
P-wave amplitude and mean pulmonary artery pressure in scleroderma, 385
real-time multichannel system for beat-to-beat QT variability, 358

12-lead ECGs (*continued*)
vector-based EASI lead system, 1
vs. conventional, for diagnosis of ACS, 22, 29
vs. cardiac magnetic resonance imaging, estimation of left ventricular mass in healthy subjects, 67
vs. 2-dimensional echocardiography, in assessment of P-wave morphology correlation with left atrial volumes, 225, 230
12-lead Holter electrocardiography
in evaluation of pediatric arrhythmia, 188

Vagus nerve
coronary vasospasm mediated by, causing lethal VF in variant angina, 183
Variant angina
with 31-mm ST elevation secondary to exercise testing, 309
with vagal nerve–mediated coronary vasospasm causing lethal VF, 183
Vasospastic angina
and Brugada syndrome, shortening of VF interval after verapamil administration in a patient with, 331
Vectorcardiography
relation of ST deviations to increased HR without ischemia in an experimental pig model, 169
Ventricular arrhythmias
association with ventricular late potentials in FAP, 57
late potentials on signal-averaged high-frequency ECG as triggers of, 1
recurrence in patients with ICD, effect of first VT cycle length on, 404
Ventricular fibrillation (VF)
shortening of interval after verapamil administration in a patient with Brugada syndrome and vasospastic angina, 331
Ventricular tachycardia (VT)
association with ventricular late potentials in FAP, 57
after congenital heart disease repair, long-term outcomes of radiofrequency catheter ablation with class III antiarrhythmic agents for, 219
exercise-induced, with J point ST-segment elevation, in Brugada syndrome, 409
first cycle length of, effect on ventricular arrhythmia recurrence in patients with ICD, 404
sustained, therapeutic safety of ECG, 1
Ventricular tissue
impulse propagation in late-stage embryonic and neonatal murine slices of, 425
Verapamil
administration in a patient with Brugada syndrome and vasospastic angina, shortening of VF interval after, 331
VF. *See* **Ventricular fibrillation**
VT. *See* **Ventricular tachycardia**

Wenckebach periodicity
association with 2-level atrioventricular block and concealed electrotonic conduction, 45
Wolff-Parkinson-White syndrome
alternans, bradycardia-dependent block in accessory pathway in a patient with, 419